(b) Metkem Silicon Ltd. have informed that they have set up the commercial plant based on technology developed by them jointly with Indian Institute of Science, Bangalore. The total plant is reported to be in regular operation since mid June, 1986.

(c) and (d) An exercise of evaluation of the results achieved by the production unit of Metkem Silicon Ltd. is in progress. Comparison of cost and quality of polysilicon produced by Metkem Silicon Ltd. will be available, when the exercise is completed.

(e) Government's decision in this matter as informed to Rajya Sabha on 11th March, 1985 is as follows:

"The Government have taken the decision to enter into an agreement with the Hemlock Semiconductor Corporation, USA after a careful assessment of the present stage of the techno-economic viability and cost effectiveness of the indigenously developed process. At the same time, the Government will give the fullest support to the effort for the development of indigenous process on a commercial scale, and the investment decision in regard to the National Silicon Facility will be taken only after evaluating the results achieved by the production unit of 25 TPA being set up by the Mettur Chemicals."

As per Agreement with M/s Hemlock Semiconductor Corporation of USA, Department of Electronics have so far received the process package and basic engineering package as part of knowhow.

(f) Polysilicon is being commercially produced all over the world by using either silicon tetrachloride or Trichlorosilane or silane. About 80 per cent of the world's production is based on trichlorosilane, which is used also by Hemlock Semiconductor Corporation. Less than 5 per cent of the world's production is based on silicon tetrachloride, which is being used by Metkem Silicon Limited. Two companies are using silane for the production of Silicon.

The Hemlock process is one of the earliest, proved and currently most widely used process. Attempts continue to be made to improve the process and provide better cost effectiveness.

Cost of Metkem products as produced today, in comparison with that of products from Hemlock technology would be available when the evaluation mentioned in (c) and (d) above is completed.

**Production of Electronics by the State Undertakings**

995. DR. MOHD. HASHIM KIDWAI: Will the PRIME MINISTER be pleased to state:

(a) what are the details of production by the State undertakings in the field of electronics, till March 31, 1986, and

(b) what steps are being taken by Government to increase production?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI SHIVRAJ PATIL): (a) The production by State undertakings in the field of electronics, including units in the small scale sector and SEEPZ units for the calendar year 1985 was about Rs. 163 crores. These units manufactured a variety of electronic goods like components, Black & White/Colour TV Receivers, Digital Electronic Watches, VHF/UHF communication transreceivers, test and measuring instruments, etc. Data upto March 31, 1986 for all units are not available at present.

(b) The measures taken by Government to increase production of

electronic goods are given in the enclosed statement. These apply to state sector units also.

**Statement**

• Government has taken a number of steps to formulate new promotional policy to accelerate the growth of electronics in the country. The basic thrust of new policy is in the following direction:

(1) A general liberalisation of licensing policy, with emphasis on promotion rather than on regulation.

(2) Where controls are unavoidable, as a general rule, resort will be taken to fiscal controls, in preference to physical controls.

(3) By and large, there will be no upper limit on capacity and no restriction of sectoral nature like large scale, small scale, private sector, public sector, etc. except where specific reservation are made on very special considerations.

(4) Volume production at the economic level with contemporary technology would be the guiding principle.

The following specific measures need to be highlighted:

(i) For certain category of items "broad-band" licences will be issued.

(ii) The electronic components industry has been delicensed. Also consumer durables are delicensed subject to the condition that the units would not draw upon the resources from the financial institutions.

(iii) Import of technology and foreign collaboration will be permitted in all areas of electronics. Units having foreign equity less than 40 per cent will be permitted in all areas.

(iv) For the following items, the technology will be acquired on a centralised basis to achieve economies of scales

(a) Telephone Instruments.

(b) Electronic PABX Systems.

(c) Rural Automatic Exchange.

(v) Development of small scale industry will be encouraged. Approval for a number of items have been decentralised to the level of State DIs. Investment limit for this sector has been revised to Rs. 35.0 lakhs and that for ancillary units to Rs. 45.0 lakhs.

(vi) For the sake of economies of scale, it is proposed to deveserve some of the components which are reserved for small scale sector.

(vii) Electronics units will be allowed to establish in any permissible location.

(viii) In the area of telecommunication, manufacture of telephones, EPABX teleprinters, fascimile equipment, data communication terminals etc. have been allowed in the private sector. Other items can also be taken up by private sector with Central/State Government participation of at least 51 per cent of the equity share.

(ix) In almost all areas of electronics, excluding consumer electronics, MRTP companies have been exempted from clearance under Section 21 & 22 of MRTP Act. This is besides the increase in limit of MRTP investment of Rs. 20 crores to Rs. 100 crores.

(x) A new computer policy has been announced with emphasis on the manufacture of computers based on latest technology at prices comparable with international level and progressively increase indigenisation consistent with economic viability.

(xi) Import duty on raw materials, components and capital equipment has been reduced. In the

case of computers including software and black & white TV receivers with 36" screen size, there is complete exemption from excise duty.

(xii) The import policy has been rationalised with a view to increase production.

(xiii) The Government is promoting appropriate applications of electronics to improve productivity, production quality, safety and quality of service.

**Checking of environmental Degradation in Coal and Steel manufacturing industry**

996. SHRI GURUDAS DAS GUPTA: Will the PRIME MINISTER be pleased to state:

(a) whether Government propose to take any steps to check environmental degradation in the coal and steel manufacturing industry; and

(b) if so, what are the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI Z. R. ANSARI): (a) and (b) Yes, Sir.

— Under the existing Air and Water (Prevention & Control of Pollution) Acts every industrial unit has to obtain No Objection Certificate from the concerned State Pollution Control Board.

— Guidelines have been laid down by the Department of Environment, Forests & Wild life for shifting of polluting industries like steel.

— All new major projects, including coal and steel, require environmental impact assessment before approval can be accorded.

— The Environmental Protection Act, 1986 will help to take deterrent action against the defaulting industrial units.

**Launching of the Augmented Satellite Launch Vehicle**

997. SHRI KAPIL VERMA : Will the PRIME MINISTER be pleased to state:

(a) what are the details of the plan for launching of the Augmented Satellite Launch Vehicle (A.S.L.V) into space and when it is likely to be launched from Sri Harikota; and

(b) what is the objective of the A.S.L.V.?

THE MINISTER OF STATE IN THE *MINISTRY OF SCIENCE AND TECHNOLOGY* AND IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI SHIVRAJ PATIL): (a) The approved Augmented Satellite Launch Vehicle (ASLV) project envisages two developmental flights and one flight-worthy standby. The first developmental flight of A.S.L.V. will take place from Sriharikota in the second half of this year.

(b) The objective of A.S.L.V. is to develop of low cost reliable launch vehicle capable of placing 150 kg. class of satellites in low earth orbit for a minimum life time of 100 days, at the same time developing and experimenting on advanced launch vehicle technologies and providing vital technological inputs to future launch vehicle projects of the Indian Space Research Organisation (ISRO)

**CBI raids at the premises of DDA ex-Vice-President**

998. SHRI D. B. CHANDRA GOWDA: Will the PRIME MINISTER be pleased to state:

(a) whether the C.B.I. has raided the premises of the Ex-Vice-Chairman of the Delhi Development Authority and seized incriminating documents etc., from these during June, 1986;

(b) if so, the details of the incriminating documents seized during the raids; and